

(For Reappear Candidates Old Syllabus (2023-24))

Exam Code: 121204

Paper Code: 9403

Programme: Bachelor of Arts (Semester-IV)

Course Title: Economics (International Economics and Public Finance)

Course Title: BARL-4175

Time Allowed : 3 Hours

Maximum Marks: 80

Note: Attempt five questions in all, Selecting at least one question from each section. Fifth Question can be attempted from any section. each question carries equal (16) marks.

Section-A

1. Critically examine the Classical Theory of Comparative Advantage. How does the Heckscher-Ohlin Theory improve upon it? Highlight their key assumptions and limitations.
2. Discuss the role of the World Trade Organisation (WTO) in promoting free trade. What are the major challenges faced by the WTO in dealing with the interests of developing nations?

Section-B

3. Discuss the various methods for correcting an adverse balance of payments. Explain the role of devaluation and direct controls in this context.
4. Give arguments in favour and against fixed and flexible exchange rates.

Section-C

5. What is Public Finance? Why is it important for a government? Give examples to support your answer.
6. What is public expenditure? Explain its meaning and importance in a modern economy.

Section-D

7. Define public revenue. Discuss in detail the various sources of public revenue, distinguishing between tax and non-tax revenue. Explain the importance of each in the functioning of the government.
8. Define public debt. Discuss its main objectives and importance in the economic development of a country. How does public debt help in managing government finances?

Exam Code: 121204

Paper Code: 8401

Programme: Bachelor of Arts (Semester – IV)

Course Title: English (Elective)

Course Code: BARM – 4198

Time Allotted: 3 Hours

Max Marks: 80

Section-A

Part A

- Q. 1.a) Answer all the four questions in about 100 words each (4*2=8)
- What is more important---- Biology or culture?
 - What is the essential nature of boys?
 - Comment on the title "the new American dreamers".
 - What does Ventina mean by "an Illusion of freedom" that US workers have!?

Part B

- Q. 1.b) Transcribe the following words phonetically: (1*8=8)
- accommodation, appreciation capability, utility, emergency, domestic, national, objective.

OR

Part A

- Q.2. a) Answer all the four questions in about 100 words each (4*2=8)
- What happens to the princess after her marriage?
 - Who is Mangal Singh? What was his duty?
 - What is Jasmine's disdain for Singapore based on?
 - How does the drover's wife keep herself occupied while her husband is away?

Part B

- Q. 2.b) Transcribe the following words phonetically (1*8=8)
- civilization, examination, pronunciation, University, rational, domestic, airplane, family.

Section-B

- Q. 3.a) Answer the following questions in about 150 words each (4*4=16)
- Why did the lady in the story "The Bath" buy the cut flowers?
 - Name and describe briefly the members of the Desjardines family.
 - What did Mammie forget and then remember just in time?
 - What was significant about the market on the bank of the river Niger?

OR

- Q. 3.b) Answer the following question in about 400-500 words (1*16=16)
- How does Anand bring out the hierarchical power structure inherent in society?

Section-C

- Q. 4.a) Answer the following questions in about 150 words each (4*4=16)
- What, according to Foster, is the sound foundation of a civilization?
 - What, according to Orwell, kind of instincts are aroused by a competitive sport?
 - How according to Tagore can our society be saved from Hindu Muslim conflicts?
 - In what way according to Gopal does the majority of literate Indians use English language?

OR

- Q. 4.b) Answer the following question in about 400-500 words (1*16=16)
- How did diverse influences arising from Hindu Sikh and Marxist sources enrich the personality of Sekhon?

Section-D

- Q. 5.a) Answer any one question in about 400-500 words (1*16=16)
- Explain in details how traditional gender roles keep women in their disadvantaged place according to the feminists.
 - Do you agree with Angela Dawson's statement about the ability of people to control their lives? Explain in details.

OR

- Q 5. b) Describe the good and the bad points of Hindi cinema as described by Balraj Sahni. (1*16=16)
- Q 6. Answer any one of the of the following questions in about 400-500 words (1*16=16)
- Explain how females and males are often thought to be innately different.
 - Explain whether Biology or culture is more important for the people.

Exam Code: 121204
(40)

Paper Code: 4131

Programme: Bachelor of Arts
Semester-IV

Course Title: Punjabi (Elective)

Course Code: BARL-4208

Time Allowed: 3 Hours

Max Marks: 80

ਨੋਟ: ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਸੈਕਸ਼ਨ ਹਨ। ਵਿਦਿਆਰਥੀ ਨੇ ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਹਨ। ਹਰ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਸੈਕਸ਼ਨ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ 16 ਅੰਕ ਹਨ।

ਸੈਕਸ਼ਨ-ਏ

1. 1701 ਤੋਂ 1800 ਈ: ਤੱਕ ਦੀਆਂ ਪ੍ਰਮੁੱਖ ਸਾਹਿਤਕ ਪ੍ਰਵਿਰਤੀਆਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਉ।
2. 1801 ਤੋਂ 1850 ਈ: ਤੱਕ ਦੀ ਵੀਰ ਕਾਵਿ-ਧਾਰਾ ਉੱਤੇ ਨੋਟ ਲਿਖੋ।

16

ਸੈਕਸ਼ਨ-ਬੀ

3. 1851 ਤੋਂ 1900 ਈ: ਦੇ ਸਟੇਜੀ ਅਤੇ ਧਾਰਮਿਕ ਕਾਵਿ ਦੇ ਨਿਕਾਸ ਤੇ ਵਿਕਾਸ ਉੱਤੇ ਰੋਸ਼ਨੀ ਪਾਉ।
4. 1851 ਤੋਂ 1900 ਈ: ਤੱਕ ਦੀ ਪੰਜਾਬੀ ਪੱਤਰਕਾਰੀ ਬਾਰੇ ਚਰਚਾ ਕਰੋ।

16

ਸੈਕਸ਼ਨ-ਸੀ

5. ਆਲੋਚਨਾ ਪ੍ਰਣਾਲੀ ਨਾਲ ਸੰਬੰਧਿਤ ਮੂਲ ਸੰਕਲਪ 'ਬਿੰਬ' ਤੇ 'ਪ੍ਰਤੀਕ' ਉੱਤੇ ਨੋਟ ਲਿਖੋ।
6. 'ਅਨੁਕਰਣ' ਤੇ 'ਵਿਰੋਚਨ' ਸੰਕਲਪ ਬਾਰੇ ਚਰਚਾ ਕਰੋ। 16

ਸੈਕਸ਼ਨ-ਡੀ

7. ਕਿੱਸੇ ਦੀ ਪ੍ਰਕਿਰਤੀ ਉੱਤੇ ਨੋਟ ਲਿਖੋ।
8. ਸਾਹਿਤ ਰੂਪ 'ਕਾਫ਼ੀ' ਬਾਰੇ ਦੱਸੋ। 16

ਭਾਗ- II

3. 'ਪੰਜਾਬੀ ਸਾਹਿਤ' : ਕੁਝ ਧਾਰਮਿਕ ਖ਼ਤਾਵਾਂ ਦੇ ਸਾਰ ਲਿਖੋ।
4. 'ਕੁਝ ਧਾਰਮਿਕ ਖ਼ਤਾਵਾਂ' ਅਤੇ 'ਪੰਜਾਬੀ ਸਾਹਿਤ' ਦੇ ਸੰਬੰਧ ਬਾਰੇ ਵਿਸ਼ਲੇਸ਼ਣ ਕਰੋ।

Exam Code: 121204 (B.A.)
121104 (B.Com.)

Paper Code: 9401

Bachelor of Arts/ Bachelor of Commerce (Semester-IV)
Course Title: English (Compulsory)
Course Code: BARL/BCRL -4212 ✓

Time Allowed: 3 Hours

Max Marks: 40

SECTION-A

Q1) Attempt any TEN questions. Each question carries 1 mark

(10X1=10)

a) Put in *at, on or in*.

Mozart was born in Salzburg-----1756.

b) Read the situation and make sentence using just *in time*.

A child ran into the road in front of your car. You saw the child at the last moment. (manage / stop)

c) Use *in/at/on*:

The headquarters of the company are ----- California.

d) Complete the sentences. Use *in, at or on + the following*:

The Plane	Prison
-----------	--------

Some people are _____ for crimes that they did not commit.

e) Put in *to/at/in/into* where necessary. If no preposition is necessary, leave the space empty.

I met Kate on my way-----home.

f) Write sentences about places you have been to. Use *I've been to / I've never been to + the words in bracket*.

(never) _____

g) Write sentences using *got + into / out of / on / off*.

You needed a taxi. After a few minutes a taxi stopped for you. You opened the door.

What did you do? _____

h) Complete the sentences using *by/in/on/with*

Have you ever been bitten ----- a dog?

i) Complete the sentences with the correct *preposition*.

I don't have much contact ----- Ben now.

j) Complete the sentences using an *adjective + preposition*. Choose from:

Excited	Nervous
---------	---------

Are you _____ the exam?

k) Complete the second sentence so that it means the same as the first.

What caused the explosion? What was the cause-----.

l) Which is correct?

a Can you explain this word to me?

b Can you explain me this word?

m) Put in the correct preposition after *care*. If no preposition is necessary, leave the space empty.

He's very selfish. He doesn't care ---- for other people.

n) Complete the sentence with *look for or look after*. Use the correct form of look (*looks/ looked/looking*).

The car park was full, so we had to -----look for some where else to park.

o) Complete the sentences using *hear or heard + a preposition (about/of/from)*.

Did you ----- the accident last night?

SECTION - B

Q2) Attempt any one essay in about 300 words

(1x6=6)

a) Does fashion industry needs to change?

OR

b) Is hunting an immoral act?

Q3) Give a single word for the phrases given below (Any 4)

(4*1=4)

a) Government of the people, for the people, and by the people

b) The right of self-government

c) A man whose wife is dead

d) To run away with lover in order to get married secretly

e) Able to read

f) Fit for food

SECTION - C

Q4) Give words that are similar in meaning

(2*2=4)

a) To become smaller

b) The process of bringing water to agricultural land

Q5) Fill in the blanks by choosing the appropriate word

(3x2=6)

Fertile	Collapsed	Disrupt	Roots	Deteriorated	Arid
---------	-----------	---------	-------	--------------	------

a) Irrigation can change _____ land into protective farmland.

b) Mayan history shows how the pressure of human populations can _____ the natural ecology of a region and make it unlivable.

c) Even though the earthquake was not very strong, some older buildings _____ and many others were badly damaged.

SECTION - D

Q6) Attempt any two questions in about 100 words each.

(2*3=6)

a) Explore the theme of control and power. Who seems to have control at different points in the poem *Porphyria's Lover*.b) Explore the symbolism of the "School," "Grain," and "Setting Sun." What might each represent in the poem *Because I Could Not Stop For Death*.c) Why does Frost repeat the line "And miles to go before I sleep"? What effect does this repetition have on the poem's ending and its meaning in the poem *Stopping by Woods on A Snowy Evening*

Q7) Explain any one the following with reference to the context in about 200 words

(1x4=4)

"Because I could not stop for Death –
 He kindly stopped for me –
 The Carriage held but just Ourselves –
 And Immortality"

OR

"Mistress, I dug upon your grave
 To bury a bone, in case
 I should be hungry near this spot
 When passing on my daily trot.
 I am sorry, but i quite forgot
 It was your resting-place."

Bachelor of Arts (Semester-IV)
Course Title: English (Compulsory)
Course Code: BARL-4212

Max Marks: 40

Time Allowed: 3 Hours

SECTION-A

(10X1=10)

Q1) Attempt any TEN questions. Each question carries 1 marka) Put in *at, on or in*.

Mozart was born in Salzburg-----1756.

b) Read the situation and make sentence using just *in time*.

A child ran into the road in front of your car. You saw the child at the last moment. (manage / stop)

c) Use *in/at/on*:

The headquarters of the company are ----- California.

d) Complete the sentences. Use *in, at or on + the following*:

The Plane

Prison

Some people are _____ for crimes that they did not commit.

e) Put in *to/at/in/into* where necessary. If no preposition is necessary, leave the space empty.

I met Kate on my way-----home.

f) Write sentences about places you have been to. Use *I've been to / I've never been to + the words in bracket*.

(never) _____

g) Write sentences using *got + into / out of / on / off*.

You needed a taxi. After a few minutes a taxi stopped for you. You opened the door.

What did you do? _____

h) Complete the sentences using *by/in/on/with*

Have you ever been bitten ----- a dog?

i) Complete the sentences with the correct *preposition*.

I don't have much contact ----- Ben now.

j) Complete the sentences using an *adjective + preposition*. Choose from:

Excited

Nervous

Are you _____ the exam?

k) Complete the second sentence so that it means the same as the first.

What caused the explosion? What was the cause-----.

l) Which is correct?

a Can you explain this word to me?

b Can you explain me this word?

m) Put in the correct preposition after *care*. If no preposition is necessary, leave the space empty.

He's very selfish. He doesn't care ---- for other people.

n) Complete the sentence with *look for or look after*. Use the correct form of look (*looks/ looked/looking*).

The car park was full, so we had to -----look for some where else to park. .

o) Complete the sentences using *hear or heard + a preposition (about/of/from)*.

Did you ----- the accident last night?

SECTION - B

Q2) Attempt any one essay in about 300 words

(1x6=6)

a) Does fashion industry needs to change?

OR

b) Is hunting an immoral act?

Q3) Give a single word for the phrases given below (Any 4)

(4*1=4)

a) Government of the people, for the people, and by the people

b) The right of self-government

c) A man whose wife is dead

d) To run away with lover in order to get married secretly

e) Able to read

f) Fit for food

SECTION - C

Q4) Give words that are similar in meaning

(2*2=4)

a) To become smaller

b) The process of bringing water to agricultural land

Q5) Fill in the blanks by choosing the appropriate word

(3x2=6)

Fertile	Collapsed	Disrupt	Roots	Deteriorated	Arid
---------	-----------	---------	-------	--------------	------

a) Irrigation can change _____ land into protective farmland.

b) Mayan history shows how the pressure of human populations can _____ the natural ecology of a region and make it unlivable.

c) Even though the earthquake was not very strong, some older buildings _____ and many others were badly damaged.

SECTION - D

Q6) Attempt any two questions in about 100 words each.

(2*3=6)

a) Explore the theme of control and power. Who seems to have control at different points in the poem *Porphyria's Lover*.b) Explore the symbolism of the "School," "Grain," and "Setting Sun." What might each represent in the poem *Because I Could Not Stop For Death*.c) Why does Frost repeat the line "And miles to go before I sleep"? What effect does this repetition have on the poem's ending and its meaning in the poem *Stopping by Woods on A Snowy Evening*

Q7) Explain any one the following with reference to the context in about 200 words

(1x4=4)

"Because I could not stop for Death –
 He kindly stopped for me –
 The Carriage held but just Ourselves –
 And Immortality"

OR

"Mistress, I dug upon your grave
 To bury a bone, in case
 I should be hungry near this spot
 When passing on my daily trot.
 I am sorry, but i quite forgot
 It was your resting-place."

Exam Code: 121204 (B.A.)
121104 (B.Com.)

Bachelor of Arts/ Bachelor of Commerce (Semester-IV)
Course Title: English (Compulsory)
Course Code: BARL/BCRL -4212 ✓

Max Marks: 40

Time Allowed: 3 Hours

SECTION-A

(10X1=10)

Q1) Attempt any TEN questions. Each question carries 1 mark

a) Put in *at, on or in*.

Mozart was born in Salzburg-----1756.

b) Read the situation and make sentence using just *in time*.

A child ran into the road in front of your car. You saw the child at the last moment. (manage / stop)

c) Use *in/at/on*:

The headquarters of the company are ----- California.

d) Complete the sentences. Use *in, at or on + the following*:

The Plane

Prison

Some people are _____ for crimes that they did not commit.

e) Put in *to/at/in/into* where necessary. If no preposition is necessary, leave the space empty.

I met Kate on my way-----home.

f) Write sentences about places you have been to. Use *I've been to / I've never been to + the words in bracket*.

(never) _____

g) Write sentences using *got + into / out of / on / off*.

You needed a taxi. After a few minutes a taxi stopped for you. You opened the door.

What did you do? _____

h) Complete the sentences using *by/in/on/with*

Have you ever been bitten ----- a dog?

i) Complete the sentences with the correct *preposition*.

I don't have much contact ----- Ben now.

j) Complete the sentences using an *adjective + preposition*. Choose from:

Excited

Nervous

Are you _____ the exam?

k) Complete the second sentence so that it means the same as the first.

What caused the explosion? What was the cause-----.

l) Which is correct?

a Can you explain this word to me?

b Can you explain me this word?

m) Put in the correct preposition after *care*. If no preposition is necessary, leave the space empty.

He's very selfish. He doesn't care ---- for other people.

n) Complete the sentence with *look for or look after*. Use the correct form of look (*looks/ looked/looking*).

The car park was full, so we had to -----look for some where else to park. .

o) Complete the sentences using *hear or heard + a preposition (about/of/from)*.

Did you ----- the accident last night?

Q2) Attempt any one essay in about 300 words

(1x6=6)

a) Does fashion industry needs to change?

OR

b) Is hunting an immoral act?

Q3) Give a single word for the phrases given below (Any 4)

(4*1=4)

a) Government of the people, for the people, and by the people

b) The right of self-government

c) A man whose wife is dead

d) To run away with lover in order to get married secretly

e) Able to read

f) Fit for food

SECTION - C

Q4) Give words that are similar in meaning

(2*2=4)

a) To become smaller

b) The process of bringing water to agricultural land

Q5) Fill in the blanks by choosing the appropriate word

(3x2=6)

Fertile	Collapsed	Disrupt	Roots	Deteriorated	Arid
---------	-----------	---------	-------	--------------	------

a) Irrigation can change _____ land into protective farmland.

b) Mayan history shows how the pressure of human populations can _____ the natural ecology of a region and make it unlivable.

c) Even though the earthquake was not very strong, some older buildings _____ and many others were badly damaged.

SECTION - D

Q6) Attempt any two questions in about 100 words each.

(2*3=6)

a) Explore the theme of control and power. Who seems to have control at different points in the poem *Porphyria's Lover*.

b) Explore the symbolism of the "School," "Grain," and "Setting Sun." What might each represent in the poem *Because I Could Not Stop For Death*.

c) Why does Frost repeat the line "And miles to go before I sleep"? What effect does this repetition have on the poem's ending and its meaning in the poem *Stopping by Woods on A Snowy Evening*

Q7) Explain any one the following with reference to the context in about 200 words

(1x4=4)

"Because I could not stop for Death –
He kindly stopped for me –
The Carriage held but just Ourselves –
And Immortality"

OR

"Mistress, I dug upon your grave
To bury a bone, in case
I should be hungry near this spot
When passing on my daily trot.
I am sorry, but i quite forgot
It was your resting-place."

Exam Code: 121204
(50)

Paper Code: 4113

Programme: Bachelor of Arts
Semester-IV

Course Title: History (History of the Punjab (AD 1469-1799))

Course Code: BARL-4273 ✓

Time Allowed: 3 Hours

Max Marks: 80

Note: Attempt three questions, selecting one question from first three section in about 1200 words. Attempt both questions from section IV. Each question will carry 16 marks.

Section-I

1. Discuss the religious sources to study the History of Punjab.
2. Guru Nanak Dev ji was a social reformer discuss.

Section-II

3. Describe the contribution of Guru Arjun dev ji in the development of Sikh panth.
4. Discuss the causes of the Martyrdom of Guru Teg Bahadur ji.

Section-III

5. Describe the creation and contribution of Khalsa.
6. Describe the relation with Sikhs and Zakaria khan.

Section-IV

(COMPULSORY UNIT / ATTEMPT BOTH QUESTIONS)

7. Answer any Eight questions in 25 to 30 words Each question will carry 2 marks.
- (i) How many shabads were composed by Guru Amar Dass ji?
 - (ii) Write a short note on Manji System?
 - (iii) Name the sons of Guru Ram Dass ji?
 - (iv) Who laid the foundation of Amritsar?
 - (v) Write two contributions of Guru Har Rai ji?
 - (vi) Write a note on Battle of Lahira(1634)?
 - (vii) Write two causes of imprisonment of Guru Hargobind ji?
 - (viii) Mention any two causes of the martyrdom of Guru Arjun Dev ji?
 - (ix) Write a note on Prithi chand?
 - (x) What is the importance of Adi Granth?
 - (xi) Give two results of the Martyrdom of Guru Teg Bahadur ji?
 - (xii) Write a note on the contribution of Guru Ramdass ji?
8. On the map of Punjab mark any four places and add explanatory note in 4-5 lines of the same.
- Nankana Sahib, Muktsar, Anadpur Sahib, Dera Baba Nanak, Chamkaur, Sirhind, Emnabad, Paonta Sahib.

Hindi Version

लगभग 1200 शब्दों में पहली तीन इकाइयों में से एक प्रश्न का चयन करते हुए तीन प्रश्नों का उत्तर लिखो। इकाई IV से दोनों प्रश्नों को हल करें। प्रत्येक प्रश्न 16 अंक का होगा।

सैक्शन-1

1. पंजाब के इतिहास का अध्ययन करने के लिए धार्मिक स्रोतों की चर्चा कीजिए।
2. गुरु नानक देव जी एक समाज सुधारक थे।

सैक्शन -2

3. सिक्ख पंथ के विकास में गुरु अर्जुन देव जी के योगदान का वर्णन कीजिए।
4. गुरु तेग बहादुर जी की शहादत के कारणों की विवेचना कीजिए।

सैक्शन -3

5. खालसा की रचना एवं योगदान का वर्णन कीजिए।
6. सिक्खों और जकरिया खान के साथ संबंध का वर्णन कीजिए।

सैक्शन -4

7. अनिवार्य इकाई/दोनों प्रश्नों के उत्तर दें—

किन्हीं आठ प्रश्नों के उत्तर 25 से 30 शब्दों में दीजिए। प्रत्येक प्रश्न 2 अंक का होगा।

- i. गुरु अमर दास जी ने कितने शब्दों की रचना की?
 - ii. मंजी प्रणाली पर एक संक्षिप्त टिप्पणी लिखिए।
 - iii. गुरु राम दास जी के पुत्रों के नाम बताएं?
 - iv. अमृतसर की नींव किसने रखी?
 - v. गुरु हर राय के दो योगदान लिखिए?
 - vi. लाहिरा के युद्ध (1634) पर एक टिप्पणी लिखिए।
 - vii. गुरु हरगोबिंद जी के कारावास के दो कारण लिखिए?
 - viii. गुरु अर्जुन देव जी की शहादत के किन्हीं दो कारणों का उल्लेख करें?
 - ix. पृथ्वीचंद पर एक टिप्पणी लिखिए।
 - x. आदि ग्रंथ का क्या महत्व है?
 - xi. गुरु तेग बहादुर जी की शहादत के दो परिणाम दीजिए?
 - xii. गुरु रामदास जी के योगदान पर एक टिप्पणी लिखिए।
8. पंजाब के मानचित्र पर किन्हीं चार स्थानों को चिन्हित कीजिए और उनका व्याख्यात्मक नोट जोड़िए—
- ननकाना साहिब, मुक्तसर, आनन्दपुर साहिब, डेरा बाबा नानक, चमकौर, सरहिंद, एमनाबाद, पांवटा साहिब।

Punjabi Version

ਪਹਿਲੇ ਤਿੰਨ ਯੂਨਿਟਾਂ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਦੀ ਚੋਣ ਕਰਦੇ ਹੋਏ ਲਗਭਗ 1200 ਸ਼ਬਦਾਂ ਵਿੱਚ ਤਿੰਨ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਦਿਓ। ਯੂਨਿਟ IV ਤੋਂ ਦੋਵੇ ਪ੍ਰਸ਼ਨ ਲਾਜ਼ਮੀ ਹਨ, ਹਰ ਪ੍ਰਸ਼ਨ 16 ਅੰਕ ਦਾ ਹੋਵੇਗਾ। $3 \times 16 = 48$

ਸੈਕਸ਼ਨ-1

1. ਪੰਜਾਬ ਦੇ ਇਤਿਹਾਸ ਦਾ ਅਧਿਐਨ ਕਰਨ ਲਈ ਧਾਰਮਿਕ ਸਰੋਤਾਂ ਦੀ ਚਰਚਾ ਕਰੋ।
2. ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ ਇੱਕ ਸਮਾਜ ਸੁਧਾਰਕ ਚਰਚਾ ਸਨ।

ਸੈਕਸ਼ਨ-2

3. ਸਿੱਖ ਪੰਥ ਦੇ ਵਿਕਾਸ ਵਿੱਚ ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ ਦੇ ਯੋਗਦਾਨ ਦਾ ਵਰਣਨ ਕਰੋ।
4. ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ ਦੀ ਸ਼ਹਾਦਤ ਦੇ ਕਾਰਨਾਂ ਦੀ ਚਰਚਾ ਕਰੋ।

ਸੈਕਸ਼ਨ-3

5. ਖਾਲਸੇ ਦੀ ਸਿਰਜਣਾ ਅਤੇ ਯੋਗਦਾਨ ਦਾ ਵਰਣਨ ਕਰੋ।
6. ਸਿੱਖਾਂ ਅਤੇ ਜ਼ਕਰੀਆ ਖਾਨ ਦੇ ਸੰਬੰਧਾਂ ਦਾ ਵਰਣਨ ਕਰੋ।

ਸੈਕਸ਼ਨ-4

7. (ਲਾਜ਼ਮੀ ਯੂਨਿਟ / ਦੋਵੇਂ ਸਵਾਲਾਂ ਦੀ ਕੋਸ਼ਿਸ਼)

ਕਿਸੇ ਵੀ ਅੱਠ ਸਵਾਲਾਂ ਦੇ ਜਵਾਬ 25 ਤੋਂ 30 ਸ਼ਬਦਾਂ ਵਿੱਚ ਦਿਓ ਹਰ ਸਵਾਲ ਦੇ 2 ਅੰਕ ਹੋਣਗੇ। $8 \times 2 = 16$

- i. ਗੁਰੂ ਅਮਰਦਾਸ ਜੀ ਨੇ ਕਿੰਨੇ ਸ਼ਬਦ ਰਚੇ?

- ii. ਮੰਜੀ ਸਿਸਟਮ ਉੱਤੇ ਇੱਕ ਛੋਟਾ ਨੋਟ ਲਿਖੋ?
 - iii. ਗੁਰੂ ਰਾਮਦਾਸ ਜੀ ਦੇ ਪੁੱਤਰਾਂ ਦੇ ਨਾਮ ਦੱਸੋ?
 - iv. ਅੰਮ੍ਰਿਤਸਰ ਦੀ ਨੀਂਹ ਕਿਸਨੇ ਰੱਖੀ?
 - v. ਗੁਰੂ ਹਰਿਰਾਇ ਜੀ ਦੇ ਦੋ ਯੋਗਦਾਨ ਲਿਖੋ?
 - vi. ਲਹਿਰਾ ਦੀ ਲੜਾਈ (1634) ਬਾਰੇ ਇੱਕ ਨੋਟ ਲਿਖੋ?
 - vii. ਗੁਰੂ ਹਰਿਗੋਬਿੰਦ ਸਾਹਿਬ ਜੀ ਦੀ ਕੈਦ ਦੇ ਦੋ ਕਾਰਨ ਲਿਖੋ?
 - viii. ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ ਦੀ ਸ਼ਹੀਦੀ ਦੇ ਕਿਸੇ ਦੋ ਕਾਰਨਾਂ ਦਾ ਜ਼ਿਕਰ ਕਰੋ?
 - ix. ਪ੍ਰਿਥੀ ਚੰਦ ਬਾਰੇ ਇੱਕ ਨੋਟ ਲਿਖੋ?
 - x. ਆਦਿ ਗ੍ਰੰਥ ਦਾ ਕੀ ਮਹੱਤਵ ਹੈ?
 - xi. ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ ਦੀ ਸ਼ਹੀਦੀ ਦੇ ਦੋ ਨਤੀਜੇ ਦੱਸੋ?
 - xii. ਗੁਰੂ ਰਾਮਦਾਸ ਜੀ ਦੇ ਯੋਗਦਾਨ ਬਾਰੇ ਇੱਕ ਨੋਟ ਲਿਖੋ?
8. ਪੰਜਾਬ ਦੇ ਨਕਸ਼ੇ ਤੇ ਕਿਸੇ ਵੀ ਚਾਰ ਸਥਾਨਾਂ ਦੀ ਨਿਸ਼ਾਨ ਦੇਹੀ ਕਰੋ ਅਤੇ ਅਤੇ ਉਹਨਾਂ ਦਾ ਵਿਆਖਿਆਤਮਕ ਨੋਟ ਸ਼ਾਮਲ ਕਰੋ
ਨਨਕਾਣਾ ਸਾਹਿਬ, ਮੁਕਤਸਰ, ਅਨੰਦਪੁਰ ਸਾਹਿਬ, ਡੇਰਾ ਬਾਬਾ ਨਾਨਕ, ਚਮਕੌਰ, ਸਰਹਿੰਦ, ਏਮਨਾਬਾਦ, ਪਾਉਂਟਾ ਸਾਹਿਬ।

Paper Code: 4110

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4175 ✓
Bachelor of Science (Economics)	121304	BECL-4175 ✓

Semester- IV

**Course Title: Economics (International Economics and
Public Finance)
(40)**

Time Allowed: 3 Hours**Max Marks: 80**

Attempt five questions, selecting at least one from each section fifth question may be attempted from any section.
Each question carries 16 marks.

Section- I

1. Critically examine classical theory of International trade. (16)
2. What do you understand by policy of Protection. Give arguments in favour. Protection in LDC. (6,10)

Section-II

3. What do you mean by Disequilibrium in BOP country? Suggest measures to correct deficit in BOP. (6,10)

4. Distinguish between fixed and flexible exchange Rate. Give arguments for and against flexible exchange rate. (6,10)

Section-III

5. Describe nature and scope of public finance. (16)
6. What is the significance of public expenditure in a country like. Also briefly explain the canons of public expenditure (6,10)

Section-IV

7. Explain the sources of Public Revenue. Also describe the features of a good taxation system. (6,10)
8. Describe the rationale for public debt. How does it create a burden on present and future generation? (10,6)

Paper Code: 4111

Programme	Course Code	Exam Code
Bachelor of Arts	BARL -4453	121204
Bachelor of Science (Economics)	BECL-4453	121304

Semester-IV

Course Title: Quantitative Techniques (Quantitative Techniques – IV)

Time Allowed: 3 Hrs.

Max Marks: 80

Note: Candidates are required to attempt five questions, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks. Use of simple calculator and Log table is allowed.

Section A

- (a) Define Gompertz curve. What are its different shapes?
- (b) Fit a parabola of Second degree to the following data:

X	1	2	3	4	5	6	7
Y	6	13	18	20	20	18	14

(6, 10)

- Fit the multiple linear regression X_1 on X_2 and X_3 from the following data:

X_1 :	3	5	6	8	12	14
X_2 :	16	10	7	4	3	2
X_3 :	90	72	54	42	30	12

(16)

Section B

- (a) Distinguish between probability mass function and probability density function.

(b) Two unbiased dice are thrown. Find expected value of sum of numbers of point on them. Also find variance. (6, 10)

4. In a bolt factory Machines A, B and C manufacture respectively 25%, 35% and 40% of the total of its output. Of them 5, 4 and 2 percent respectively are defective bolts. A bolt is drawn at random from the product and is found to be defective. What is the probability that it was manufactured by machine B? (16)

Section C

5. Fit a Poisson distribution to the following data:

x	0	1	2	3	4	5	6
f	143	90	42	12	9	3	1

Given that $e^{-0.89} = 0.410656$ (16)

6. Derive the properties of Gamma function in details. (16)

Section D

7. (a) Explain Standard Error of Estimate.

(b) Sampling and non-sampling errors. (8, 8)

8. What is random sampling? Discuss its various types with the help of an example. (16)

Paper Code: 4138

Programme	Course Code	Exam Code
Bachelor of Arts	BARL-4609 (OPT-IV)	121204
Bachelor of Science (Economics)	BECL-4607 (OPT-IV)	121304

Semester-IV**Course Title: Economics (Honours) International Economics****Time Allowed: 3 Hours****Max. Marks : 80**

Note: Candidates are required to attempt five questions, selecting atleast one question from each section. The fifth question may be attempted from any section. Each question carries 16 marks.

Section A

1. Critically examine the Comparative cost theory of international trade.
2. Discuss the secular deterioration hypothesis of term of trade. Explain its limitations also.

Section B

3. Discuss, in detail, trade creation and trade diversion effects of custom union.
4. Discuss, in detail, the relationship between trade, aid and economic development.

Section C

5. Distinguish between fixed and flexible exchange rate. What are its merits and demerits?
6. Critically examine the concept of foreign trade multiplier.

Section D

7. Discuss the objective and functions of IMF. What are its limitations?
8. Explain the success and failures of East Asian countries.

Paper Code: 4108

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARM-4134 ✓
Bachelor of Science (Computer Science)	121304	BCSM-4134 ✓
Bachelor of Science (Economics)		BECM-4134 ✓

Semester-IV

Course Title: Computer Science (Data Structures)

(40)

Time Allowed: 3 Hours

Max Marks: 50

Note: There are eight questions of equal marks (10 marks each). Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section. The students can use Non—programmable/ scientific & Non—storage type calculator.

Section A

1. What do you mean by Data Structures? How can you measure complexity of an algorithm? (10)
2. a) What is array? How it is represented in memory? (6)
- b) What do you understand by multi dimensional array? (4)

Section B

3. a) Explain types of Linked list. (6)
b) Write advantages of linked list over array. (4)
4. Write Quicksort algorithm and apply it on the following set of numbers to arrange them in the ascending order: (10)
99,88,77,66,55,44,33,22,11

Section C

5. a) How will you represent queues in memory? (6)
b) What do you mean by priority queue? (4)
6. Using Binary search, find the locations of the elements 44 and 101. (10)
99, 11, 33, 88, 22, 44, 77

Section D

7. Explain DFS and BFS graph traversals algorithms with examples. (10)
8. Write a note on the following (4*2.5 = 10)
 - a) Binary Search tree L
 - b) Complete binary tree
 - c) Heap
 - d) Adjacency matrix

Paper Code: 4106

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARM-4333 (I) ✓✓
Bachelor of Science (Non-Medical)	121304	BSNM-4333 (I) ✓✓
Bachelor of Science (Economics)		BECM-4333 (I) ✓✓
Bachelor of Science (Computer Science)		BCSM-4333 (I) ✓✓

Semester-IV

Course Title: Mathematics (Statics and Vector Calculus)

(40)

Time Allowed: 3 Hours

Max Marks: 80

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries equal marks (16 marks for each question).

Section -A

- Q 1.(a) State and prove Lami's Theorem.
- Q 1.(b) The greatest and least resultants that two forces can have are of magnitude P and Q respectively. Show that when they act at an angle θ , their resultant is of magnitude $\sqrt{P^2 \cos^2 \frac{\theta}{2} + Q^2 \sin^2 \frac{\theta}{2}}$.
- Q 2.(a) State Varignon's Theorem and using this theorem calculate the moment of F about the origin when a force acts at a point (3,4) of the XY plane, The force is directed away from the origin and inclined at 60° to the X-axis. The horizontal component of F is 5 kg wt. Also find force F.

Q 2.(b)

Forces of magnitude 5 kg, 10 kg, Q kg and R kg act along the sides AB, BC, DC and DA of a square ABCD and forces each of magnitude $5\sqrt{2}$ kg act along the sides BD, CA. If these forces are equivalent to a couple, find Q and R.

Section -B

Q 3.(a)

Two equal weights rest on the faces of a double inclined plane whose inclinations to the horizon are α and β and are connected by a string passing over a smooth pulley on the vertex. If the weights be in limiting equilibrium show that the coefficient of friction is equal to $\frac{\sin \alpha - \sin \beta}{\cos \alpha + \cos \beta}$.

Q 3.(b)

How high can a particle rest inside a rough hollow sphere of radius r if the coefficient of friction is μ .

Q 4.(a)

ABC is an equilateral triangle of side 40 cms. Weights 5, 1, 3 kgs are placed at points A, B, C respectively and Weights 2, 4, 6 kgs are placed at mid points of BC, CA and AB respectively. Find the distance of their C.G. from B.

Q 4.(b)

A uniform solid consists of a cone of semi- vertical angle 45° cemented on a hemisphere on the same base. Show that the C.G. of the body divides its central axis in the ratio 7 : 5.

Section -C

Q 5.(a)

Find the directional derivative of $f(x, y, z) = x^2 y^2 z^2$ at the point $(1, 1, -1)$ in the direction of the tangent to the curve $x = e^t$,
 $y = 2 \sin t + 1$, $z = t - \cos t$ at $t = 0$.

Q 5.(b)

$$\text{If } \vec{r} = t^3 \hat{i} + \left(2t^3 - \frac{1}{5t^2} \right) \hat{j},$$

$$\text{show that } \vec{r} \times \frac{d\vec{r}}{dt} = \hat{k}$$

Q 6.(a)

Find the constants a, b, c so that the vector

$$\vec{r} = (x + 2y + az)\hat{i} + (bx - 3y - z)\hat{j} + (4x + cy + 2z)\hat{k} \text{ is irrotational.}$$

Evaluate

Q 6.(b)

$$\int_0^1 \left[t\hat{i} + (t^2 - 2t)\hat{j} + (3t^2 + 3t^3)\hat{k} \right] dt$$

Section -D

State Stoke's Theorem and verify it for

$$\vec{F} = y\hat{i} + z\hat{j} + x\hat{k}$$

Q 7.(a)

where S is the upper half surface of the sphere $x^2 + y^2 + z^2 = 1$ and C is boundary.

Verify Green's theorem in a plane for

$$\oint_C \left((x^2 - xy^3)dx + (y^2 - 2xy)dy \right)$$

Q 7.(b)

where C is the square with vertices (0,0), (2,0), (2,2), (0,2),

Q8.

State Gauss's Divergence Theorem and

use it to evaluate $\iiint_S \vec{f} \cdot \hat{n} dS$ where $\vec{f} = 4xy\hat{i} + yz\hat{j} - xz\hat{k}$

and S is the surface of the cube

bounded by the planes $x = 0, x = 2,$ $y = 0, y = 2, z = 0, z = 2.$

Paper Code: 9412.

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARM-4333 (I) ✓✓
Bachelor of Science (Non-Medical)	121304	BSNM-4333 (I) ✓✓
Bachelor of Science (Economics)		BECM-4333 (I) ✓✓
Bachelor of Science (Computer Science)		BCSM-4333 (I) ✓✓

Semester-IV**Course Title: Mathematics (Statics and Vector Calculus)**
(40)**Time Allowed: 3 Hours****Max Marks: 40**

Note: Attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section. Each question carries equal marks (8) marks for each question).

Section -A

Q 1.(a) State and prove Lami's Theorem.

Q 1.(b) The greatest and least resultants that two forces can have are of magnitude P and Q respectively. Show that when they act at an angle θ , their resultant is of magnitude $\sqrt{P^2 \cos^2 \frac{\theta}{2} + Q^2 \sin^2 \frac{\theta}{2}}$.

Q 2.(a) State Varignon's Theorem and using this theorem calculate the moment of F about the origin when a force acts at a point (3,4) of the XY plane. The force is directed away from the origin and inclined at 60° to the X-axis. The horizontal component of F is 5 kg wt. Also find force F.

- Q 2.(b) Forces of magnitude 5 kg, 10 kg, Q kg and R kg act along the sides AB, BC, DC and DA of a square ABCD and forces each of magnitude $5\sqrt{2}$ kg act along the sides BD, CA. If these forces are equivalent to a couple, find Q and R.

Section -B

- Q 3.(a) Two equal weights rest on the faces of a double inclined plane whose inclinations to the horizon are α and β and are connected by a string passing over a smooth pulley on the vertex. If the weights be in limiting equilibrium show that the coefficient of friction is equal to $\frac{\sin \alpha - \sin \beta}{\cos \alpha + \cos \beta}$

- Q 3.(b) How high can a particle rest inside a rough hollow sphere of radius r if the coefficient of friction is μ .

- Q 4.(a) ABC is an equilateral triangle of side 40 cms. Weights 5, 1, 3 kgs are placed at points A, B, C respectively and Weights 2, 4, 6 kgs are placed at mid points of BC, CA and AB respectively. Find the distance of their C.G. from B.

- Q 4.(b) A uniform solid consists of a cone of semi- vertical angle 45° cemented on a hemisphere on the same base. Show that the C.G. of the body divides its central axis in the ratio 7 : 5.

Section -C

- Q 5.(a) Find the directional derivative of $f(x, y, z) = x^2 y^2 z^2$ at the point $(1, 1, -1)$ in the direction of the tangent to the curve $x = e^t$,
 $y = 2 \sin t + 1$, $z = t - \cos t$ at $t = 0$.

Q 5.(b) If $\vec{r} = t^3 \hat{i} + \left(2t^3 - \frac{1}{5t^2} \right) \hat{j}$,

show that $\vec{r} \times \frac{d\vec{r}}{dt} = \hat{k}$

Q 6.(a) Find the constants a, b, c so that the vector
 $\vec{r} = (x + 2y + az)\hat{i} + (bx - 3y - z)\hat{j} +$
 $(4x + cy + 2z)\hat{k}$ is irrotational.

Evaluate

Q 6.(b) $\int_0^1 [t\hat{i} + (t^2 - 2t)\hat{j} + (3t^2 + 3t^3)\hat{k}] dt$

Section -D

State Stoke's Theorem and verify it for

$$\vec{F} = y\hat{i} + z\hat{j} + x\hat{k}$$

Q 7.(a) where S is the upper half surface of the
 sphere $x^2 + y^2 + z^2 = 1$ and C is boundary.

Verify Green's theorem in a plane for

$$\oint_C ((x^2 - xy^3)dx + (y^2 - 2xy)dy)$$

Q 7.(b) where C is the square with vertices (0,0),
 (2,0), (2,2), (0,2),

Q8.

State Gauss's Divergence Theorem and

use it to evaluate $\iiint_S \vec{f} \cdot \hat{n} dS$ where $\vec{f} = 4xy\hat{i} + yz\hat{j} - xz\hat{k}$

and S is the surface of the cube

bounded by the planes $x = 0, x = 2,$
 $y = 0, y = 2, z = 0, z = 2.$

Paper Code: 4107

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARM-4333(II) ✓
Bachelor of Science (Non-Medical)	121304	BSNM-4333(II) ✓
Bachelor of Science (Economics)		BECM-4333 (II) ✓
Bachelor of Science (Computer Science)		BCSM-4333 (II) ✓

Semester-IV**Course Title: Mathematics (Solid Geometry)****(40)****Time Allowed: 3 Hours****Max Marks: 60**

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. All question carry equal 12 marks.

Section-A

1(a). Find the equation of the cylinder whose generators are parallel to the line $\frac{x}{1} = \frac{y}{-2} = \frac{z}{3}$ and whose guiding curve is the ellipse $x^2 + 2y^2 = 1, z = 0$.

(b). Find the equation of the right circular cylinder whose generating circle is $x^2 + y^2 + z^2 = 4, x + y + z = 3$.

2(a). Find the equation of the enveloping cylinder of the conicoid $ax^2 + by^2 + cz^2 = 1$ whose generators are parallel to the line $\frac{x}{l} = \frac{y}{m} = \frac{z}{n}$.

(b). Obtain the equation of the right circular cylinder described on the circle through the points (1, 0, 0), (0, 1, 0), (0, 0, 1) as the guiding circle.

Section-B

3(a). Find the equation of the cone, whose vertex is the point (2, 3, -5) and the guiding curve is $y^2 = 8x, z = 0$.

(b). Find the equation of the right circular cone whose vertex is P (2, 3, 1), axis makes equal angles with coordinate axes and semi vertical angle is 60° .

4(a). Find the value of λ if the plane $\lambda x + y + z = 0$ cuts the cone $xy + yz + zx = 0$ in perpendicular lines.

(b). Check whether $2x^2 + 2y^2 + 7z^2 - 10yz - 10zx + 2x + 2y + 26z - 17 = 0$ represents a cone. If yes, find the coordinates of vertex of this cone.

Section-C

5(a). Check whether the feet of the six normals from (α, β, γ) to the ellipsoid $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$ lies on the cone $\frac{a^2(b^2-c^2)}{x}\alpha + \frac{b^2(c^2-a^2)}{y}\beta + \frac{c^2(a^2-b^2)}{z}\gamma = 0$ or not.

(b). Trace the locus of the equation $\frac{x^2}{a^2} + \frac{y^2}{b^2} = \frac{2z}{c}$ where a, b, c are positive.

6(a). Find the condition that the plane $lx + my + nz = p$ may touch the conicoid $ax^2 + by^2 + cz^2 = 1$.

(b). Reduce the following equation to the standard form and identify the curve

$$x^2 - 4xy + 4y^2 - 32x + 4y + 16 = 0.$$

Section-D

7. Check whether the $5x^2 - 16y^2 + 5z^2 + 8yz - 14zx + 8xy + 4x + 20y + 4z - 24 = 0$ represents hyperbolic paraboloid. If yes, find the coordinates of its vertex and the equation of its axes.

8(a). Check whether the surface represented by

$$x^2 + 6y^2 - z^2 - yz + 5xy + 2x + 5y = 0$$
 is hyperbolic cylinder. Justify your answer.

(b). Reduce the equation into standard conic

$$9x^2 + 4y^2 + 4z^2 + 8yz + 12zx + 12xy + 4x + y + 10z + 1 = 0.$$

Paper Code: 9413

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARM-4333(II)
Bachelor of Science (Non-Medical)	121304	BSNM-4333(II)
Bachelor of Science (Economics)		BECM-4333 (II) ✓
Bachelor of Science (Computer Science)		BCSM-4333 (II)

Semester-IV

Course Title: Mathematics (Solid Geometry)

(40)

Time Allowed: 3 Hours

Max Marks: 40

Note: Attempt five questions in all, selecting at least one question from each section. The fifth question may be attempted from any Section. All question carry equal 8 marks.

Section-A

1(a). Find the equation of the cylinder whose generators are parallel to the line $\frac{x}{1} = \frac{y}{-2} = \frac{z}{3}$ and whose guiding curve is the ellipse $x^2 + 2y^2 = 1, z = 0$.

(b). Find the equation of the right circular cylinder whose generating circle is $x^2 + y^2 + z^2 = 4, x + y + z = 3$.

2(a). Find the equation of the enveloping cylinder of the conicoid $ax^2 + by^2 + cz^2 = 1$ whose generators are parallel to the line $\frac{x}{l} = \frac{y}{m} = \frac{z}{n}$.

(b). Obtain the equation of the right circular cylinder described on the circle through the points (1, 0, 0), (0, 1, 0), (0, 0, 1) as the guiding circle.

Section-B

3(a). Find the equation of the cone, whose vertex is the point (2, 3, -5) and the guiding curve is $y^2 = 8x, z = 0$.

(b). Find the equation of the right circular cone whose vertex is P (2, 3, 1), axis makes equal angles with coordinate axes and semi vertical angle is 60° .

4(a). Find the value of λ if the plane $\lambda x + y + z = 0$ cuts the cone $xy + yz + zx = 0$ in perpendicular lines.

(b). Check whether $2x^2 + 2y^2 + 7z^2 - 10yz - 10zx + 2x + 2y + 26z - 17 = 0$ represents a cone. If yes, find the coordinates of vertex of this cone.

Section-C

5(a). Check whether the feet of the six normals from (α, β, γ) to the ellipsoid $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$ lies on the cone $\frac{a^2(b^2-c^2)}{x}\alpha + \frac{b^2(c^2-a^2)}{y}\beta + \frac{c^2(a^2-b^2)}{z}\gamma = 0$ or not.

(b). Trace the locus of the equation $\frac{x^2}{a^2} + \frac{y^2}{b^2} = \frac{2z}{c}$ where a, b, c are positive.

6(a). Find the condition that the plane $lx + my + nz = p$ may touch the conicoid $ax^2 + by^2 + cz^2 = 1$.

(b). Reduce the following equation to the standard form and identify the curve

$$x^2 - 4xy + 4y^2 - 32x + 4y + 16 = 0.$$

Section-D

7. Check whether the $5x^2 - 16y^2 + 5z^2 + 8yz - 14zx + 8xy + 4x + 20y + 4z - 24 = 0$ represents hyperbolic paraboloid. If yes, find the coordinates of its vertex and the equation of its axes.

8(a). Check whether the surface represented by

$$x^2 + 6y^2 - z^2 - yz + 5xy + 2x + 5y = 0 \text{ is hyperbolic cylinder. Justify your answer.}$$

(b). Reduce the equation into standard conic

$$9x^2 + 4y^2 + 4z^2 + 8yz + 12zx + 12xy + 4x + y + 10z + 1 = 0.$$

Paper Code: 4102

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4031 ✓
Bachelor of Science (Non-Medical)	121304	BSNL-4031 ✓
Bachelor of Science (Medical)		BSML-4031 ✓
Bachelor of Science (Economics)		BECL-4031
Bachelor of Science (Computer Science)		BCSL-4031 ✓
Bachelor of Commerce	121104	BCRL-4031
Bachelor of Business Administration	121704	BBRL-4031

Semester- IV**Course Title: Basic Punjabi****(40)****Time Allowed: 3 Hours****Max Marks: 80**

ਨੋਟ: ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੇ ਚਾਰ ਭਾਗ ਹਨ। ਵਿਦਿਆਰਥੀ ਨੇ ਹਰ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ, ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ (16) ਅੰਕ ਹਨ।

ਭਾਗ-ਪਹਿਲਾ

- ਹੇਠ ਲਿਖੀਆਂ ਕਾਵਿ-ਸਤਰਾਂ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰੋ।
ਕਮਦਿਲਾਂ ਨੂੰ ਦਿਲ, ਨਪਰਿਆਂ ਪਰ ਦਈਂ।

ਯਾ ਖੁਦਾ ਸਭ ਬੇ-ਘਰਾਂ ਨੂੰ ਘਰ ਦਈਂ।
 ਹਰ ਸੁਹਾਗਣ ਦਾ ਰਹੇ ਜਿੰਦਾ ਸੁਹਾਗ
 ਉਮਰ ਲੰਘਦੀ ਜਾ ਰਹੀ ਨੂੰ ਵਰ ਦਈਂ
 ਤੋਤਲੇ ਬੋਲਾਂ ਦਾ ਰਾਖਾ ਖੁਦ ਬਣੀ,
 ਖੋਫ ਹਰ ਕਾਤਿਲ ਤੇ ਸੀਨੇ ਭਰ ਦਈਂ।

2. ਹੇਠ ਲਿਖੀਆਂ ਕਾਵਿ-ਸਤਰਾਂ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰੋ।
 ਹੁਣ ਘਰਾਂ ਨੂੰ ਪਰਤਣਾ ਮੁਸ਼ਕਿਲ ਬੜਾ ਹੈ
 ਕੌਣ ਪਹਿਚਾਣੇਗਾ ਸਾਨੂੰ
 ਮੱਥੇ ਉੱਤੇ ਮੌਤ ਦਸਖਤ ਕਰ ਗਈ ਹੈ
 ਚਿਹਰੇ ਉੱਤੇ ਯਾਰ ਪੈੜਾਂ ਛੱਡ ਗਏ ਨੇ
 ਸ਼ੀਸ਼ੇ ਵਿਚੋਂ ਹੋਰ ਕੋਈ ਝਕਦਾ ਹੈ
 ਅੱਖਾਂ ਵਿਚ ਕੋਰੀ ਲਿਸ਼ਕ ਹੈ।

ਭਾਗ-ਦੂਸਰਾ

3. ਡਾ. ਜਗਤਰ ਦੀ ਕਵਿਤਾ 'ਰੋਸ਼ਨੀ ਦਾ ਦੌਰ' ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿਚ ਲਿਖੋ।
 4. ਮੋਹਨ ਸਿੰਘ ਦੀ ਕਵਿਤਾ 'ਸੈਦਾ ਤੇ ਸਬਜ਼ਾਂ' ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿਚ ਲਿਖੋ।

ਭਾਗ-ਤੀਜਾ

5. ਕਵੀ ਪਾਸ਼ ਦੇ ਜੀਵਨ ਅਤੇ ਰਚਨਾਵਾਂ ਬਾਰੇ ਵਿਸਤ੍ਰਿਤ ਨੋਟ ਲਿਖੋ।
 6. ਕਵੀ ਮੋਹਨ ਸਿੰਘ ਦੇ ਜੀਵਨ ਰਚਨਾਵਾਂ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ।

ਭਾਗ-ਚੌਥਾ

7. ਹੇਠ ਲਿਖੇ ਅਸ਼ੁੱਧ ਸ਼ਬਦਾਂ ਨੂੰ ਸੁੱਧ ਕਰਕੇ ਲਿਖੋ।
ਸਬਦ, ਨੌਕਰੀ, ਔਖੀ, ਨਿਪੁਨਸਕ ਬੰਦਾ, ਕਿੱਕਰਾ ਦੇ ਫੁੱਲ,
ਸੈਕਰੇਟਰੀ, ਗੁਰੂ ਆਮਰਦਾਸ ਜੀ, ਆਮਾਨਤ, ਗੋਰਵ।
8. ਹੇਠ ਲਿਖੇ ਅਸ਼ੁੱਧ ਸ਼ਬਦਾਂ ਨੂੰ ਸੁੱਧ ਕਰਕੇ ਲਿਖੋ।
ਅਸਕੇ, ਪੇੜੀ ਚੜ, ਕੋਲੀ ਫੜ, ਚੋਲ ਖਾ, ਗੋਲੀ, ਚਮਣ ਕੱਦੂ,
ਕਾਲਿਜ, ਬੱਸਾ ਚੱਲੀਆਂ, ਹਰਮੰਦਰ ਸਾਹਿਬ, ਸੀਸਾ।

Paper Code: 4101

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4421
Bachelor of Science (Non-Medical)	121304	BSNL-4421
Bachelor of Science (Medical)		BSML-4421
Bachelor of Science (Economics)		BECL-4421 ✓
Bachelor of Science (Computer Science)		BCSL-4421
Bachelor of Commerce	121104	BCRL-4421 ✓
Bachelor of Business Administration	121704	BBRL-4421 ✓

Semester- IV**Course Title: Punjabi (Compulsory)****(160)****Time Allowed: 3 Hours****Max Marks: 80**

ਨੋਟ: ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਜ਼ਰੂਰੀ ਹਨ। ਹਰੇਕ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ (16) ਅੰਕ ਹਨ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।

ਭਾਗ-ੳ

- 1) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਲਿਖੋ।

- 2) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਸਾਰ ਸੰਖੇਪ ਵਿੱਚ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ। (16 ਅੰਕ)

ਭਾਗ-ਅ

- 3) “ਫਾਸਲੇ” ਨਾਟਕ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਕੀ ਹੈ? ਸਪੱਸ਼ਟ ਕਰੋ।
 4) “ਫਾਸਲੇ” ਨਾਟਕ ਦੀਆਂ ਨਾਟਕੀ ਜੁਗਤਾਂ ਬਾਰੇ ਚਰਚਾ ਕਰੋ। (16 ਅੰਕ)

ਭਾਗ-ਬ

- 5) ਪੰਜਾਬ ਸਰਕਾਰ ਦੇ ਮੁੱਖ ਚੋਣ ਅਫਸਰ ਨੂੰ ਇੱਕ ਚਿੱਠੀ ਰਾਹੀਂ ਆਪਣੇ ਪਿੰਡ ਵਿੱਚ ਚੋਣਾਂ ਦਰਾਨ ਹੋਈਆਂ ਬੇਨਿਯਮੀਆਂ ਤੋਂ ਜਾਣੂ ਕਰਵਾਓ।
 6) “ਗੁਆਚੇ ਦੀ ਭਾਲ” ਸੰਬੰਧੀ ਇਸ਼ਤਿਹਾਰ ਲਿਖੋ। (16 ਅੰਕ)

ਭਾਗ-ਸ

- 7) ਸ਼ਬਦ ਜੋੜਾਂ ਦੇ ਨਿਯਮਾਂ ਦਾ ਉਲੇਖ ਕਰੋ।
 8) ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਸਪੱਸ਼ਟ ਕਰੋ। (16 ਅੰਕ)

FOR GAP YEAR STUDENTS (2023-24).

Paper Code: 9426.

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4421
Bachelor of Science (Non-Medical)	121304	BSNL-4421
Bachelor of Science (Medical)		BSML-4421
Bachelor of Science (Economics)		BECL-4421
Bachelor of Science (Computer Science)		BCSL-4421
Bachelor of Commerce	121104	BCRE-4421
Bachelor of Business Administration	121704	BBRL-4421

Semester- IV

Course Title: Punjabi (Compulsory)
(160)

Time Allowed: 3 Hours

Max Marks: 40

ਨੋਟ: ਕੁੱਲ ਪੰਜ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਜ਼ਰੂਰੀ ਹਨ। ਹਰੇਕ ਭਾਗ ਵਿਚੋਂ ਇਕ ਪ੍ਰਸ਼ਨ ਕਰਨਾ ਲਾਜ਼ਮੀ ਹੈ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ ਬਰਾਬਰ (8) ਅੰਕ ਹਨ। ਪੰਜਵਾਂ ਪ੍ਰਸ਼ਨ ਕਿਸੇ ਵੀ ਭਾਗ ਵਿਚੋਂ ਕੀਤਾ ਜਾ ਸਕਦਾ ਹੈ।

ਭਾਗ-ੳ

- 1) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਲਿਖੋ।

- 2) “ਪਗਡੰਡੀਆਂ” ਸਵੈਜੀਵਨੀ ਦਾ ਸਾਰ ਸੰਖੇਪ ਵਿੱਚ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।

ਭਾਗ-ਅ

- 3) “ਫਾਸਲੇ” ਨਾਟਕ ਦਾ ਵਿਸ਼ਾ-ਵਸਤੂ ਕੀ ਹੈ? ਸਪੱਸ਼ਟ ਕਰੋ।
4) “ਫਾਸਲੇ” ਨਾਟਕ ਦੀਆਂ ਨਾਟਕੀ ਜੁਗਤਾਂ ਬਾਰੇ ਚਰਚਾ ਕਰੋ।

ਭਾਗ-ਬ

- 5) ਪੰਜਾਬ ਸਰਕਾਰ ਦੇ ਮੁੱਖ ਚੋਣ ਅਫਸਰ ਨੂੰ ਇੱਕ ਚਿੱਠੀ ਰਾਹੀਂ ਆਪਣੇ ਪਿੰਡ ਵਿੱਚ ਚੋਣਾਂ ਦਰਾਨ ਹੋਈਆਂ ਬੇਨਿਯਮੀਆਂ ਤੋਂ ਜਾਣੂ ਕਰਵਾਓ।
6) “ਗੁਆਚੇ ਦੀ ਭਾਲ” ਸੰਬੰਧੀ ਇਸ਼ਤਿਹਾਰ ਲਿਖੋ।

ਭਾਗ-ਸ

- 7) ਸ਼ਬਦ ਜੋੜਾਂ ਦੇ ਨਿਯਮਾਂ ਦਾ ਉਲੇਖ ਕਰੋ।
8) ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੀਆਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਸਪੱਸ਼ਟ ਕਰੋ।

Paper Code: 4103

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL-4431 ✓
Bachelor of Science (Non-Medical)	121304	BSNL-4431 ✓
Bachelor of Science (Medical)		BSML-4431 ✓
Bachelor of Science (Economics)		BECL-4431
Bachelor of Science (Computer Science)		BCSL-4431 ✓
Bachelor of Commerce	121104	BCCL-4431
Bachelor of Business Administration	121704	BBRL-4431

Semester- IV**Course Title: Punjab History and Culture****(30)****Time Allowed: 3 Hours****Max Marks: 80**

Note: Attempt five question, selecting at least one question from each section in 1000 words and the fifth question may be selected from any of the four section. Each question carries 16 marks.

Section-I

1. What contribution was made by Guru Har Gobind ji in the transformation of Sikhism?

2. What were the causes of martyrdom of Guru Teg Bahadur Ji?

Section-II

3. Discuss the main principles and significance of Khalsa Panth.
4. Discuss the circumstances which led to the creation of Khalsa in 1699.

Section-III

5. Explain the achievements of Banda Singh Bahadur.
6. Write a detailed note on Ahluwalia Misl and Ramgarhia Misl.

Section-IV

7. Write a note on Baisakhi and Diwali.
8. Discuss the military administration under Maharaja Ranjit Singh.

Hindi Version

सैक्शन-1

1. सिख धर्म के परिवर्तन में गुरु हर गोबिंद जी का क्या योगदान था?
2. गुरु तेग बहादुर जी की शहादत के क्या कारण थे?

सैक्शन-2

3. खालसा पंथ के प्रमुख सिद्धांतों और महत्व की चर्चा कीजिए।
4. उन परिस्थितियों की चर्चा कीजिए जिनके कारण 1699 में खालसा का निर्माण हुआ।

सैक्शन-3

5. बंदा सिंह बहादुर की उपलब्धियों का वर्णन कीजिए।
6. अहलूवालिया मिसल और रामगढ़िया मिसल पर एक विस्तृत टिप्पणी लिखिए।

सैक्शन-4

7. बैसाखी और दीवाली पर एक नोट लिखिए।
8. महाराजा रणजीत सिंह के अधीन सैन्य प्रशासन की चर्चा कीजिए।

Paper Code: 4104

Programme	Exam Code	Course Code
Bachelor of Arts	121204	BARL -4212
Bachelor of Science (Medical)	121304	BSML -4212
Bachelor of Science (Non-Medical)		BSNL -4212
Bachelor of Science (Computer Science)		BCSL -4212
Bachelor of Science (Economics)		BECL -4212
Bachelor of Commerce	121104	BCRL -4212
Bachelor of Business Administration	121704	BBRL -4212

Semester - IV**Course Title: English (Compulsory)****Time Allowed: 3 Hours****Max Marks: 80****SECTION-A****Q1) Attempt any TEN questions. Each question carries 2 marks****(10X2= 20)**a) Put in *at, on or in*.

I've been invited to a wedding _____ 14 February.

b) Read the situation and make sentence using just *in time*.

A child ran into the road in front of your car. You saw the child at the last moment. (manage / stop)

c) Use *in, at or on*.

Where's the label? _____

d) Complete the sentences. Use *in, at or on + the following*:

The Plane	Prison
-----------	--------

Some people are _____ for crimes that they did not commit.

e) Put in *to/at/in/into* where necessary. If no preposition is necessary, leave the space empty.

I'm tired. Let's go _____ home now.

f) Write sentences about places you have been to. Use *I've been to* / *I've never been to* + the words in bracket.

(never) _____

g) Write sentences using *got + into / out of / on / off*.

You were walking home. A friend passed you in her car. She saw you, stopped and offered you a lift. She opened the door.

What did you do? _____

h) Complete the sentences using *by*.

Carl won the race. He was five metres in front of the other runners.

Carl _____

i) Complete the sentences with the correct *preposition*.

There are some differences _____ British and American English.

j) Complete the sentences using an *adjective + preposition*. Choose from:

Excited	Nervous
---------	---------

Are you _____ the exam?

k) Complete the second sentence so that it means the same as the first.
There were lots of tourists in the streets. The streets were crowded _____

l) Which is correct?

i. Can you explain this word to me?

ii. Can you explain me this word?

m) Put in the correct preposition after *care*. If no preposition is necessary, leave the space empty.

Who's going to take care _____ you when you are old?

n) Complete the sentence with *look for* or *look after*. Use the correct form of look (*looks/ looked/looking*).

I _____ for my keys, but I couldn't find them anywhere.

o) Complete the sentences using *hear or heard + a preposition* (*about/of/from*).

I'm surprised you haven't _____ her. She's quite famous.

SECTION - B

Q2) Attempt any one essay in about 400 words. (1x10=10)

a) Does fashion industry needs to change?

OR

b) Is hunting an immoral act?

Q3) Give a single word for the phrases given below (any 5) (5x2=10)

- a) Government of the people, for the people, and by the people
- b) The right of self-government
- c) A man whose wife is dead
- d) To run away with lover in order to get married secretly
- e) Able to read
- f) Fit for food
- g) That which cannot be conquered
- h) Unable to die

SECTION - C

Q4) Give words that are similar in meaning: (5x2=10)

- a) To become smaller
- b) The process of bringing water to agricultural land
- c) Regions or areas
- d) To use up something completely
- e) Needing many years to develop

Q5) Fill in the blanks by choosing the appropriate word: (5x2=10)

Fertile	Collapsed	Disrupt	Roots	Deteriorated	Arid
---------	-----------	---------	-------	--------------	------

- a) Irrigation can change _____ land into protective farmland.
- b) Mayan history shows how the pressure of human populations can _____ the natural ecology of a region and make it unlivable.
- c) Even though the earthquake was not very strong, some older buildings _____ and many others were badly damaged.
- d) The _____ of this plant do not reach deep into the soil. That's why it will not grow in regions with little rainfall.
- e) Weather forecasters are advising motorists not to drive today because conditions on the roads have _____ rapidly in the last two hours.

SECTION - D

Q6) Attempt any three questions in about 200 words each. (3x5=15)

- a) Explore the theme of control and power. Who seems to have control at different points in the poem *Porphyrion's Lover*.
- b) Explore the symbolism of the "School," "Grain," and "Setting Sun." What might each represent in the poem *Because I Could Not Stop For Death*.
- c) Why does Frost repeat the line "And miles to go before I sleep"? What effect does this repetition have on the poem's ending and its meaning in the poem *Stopping by Woods on A Snowy Evening*?
- d) What does the poem reveal about human expectations after death in the poem *Ah! Are You Digging on my Grave*?
- e) Analyse the meaning of the final line: "The only emperor is the emperor of ice-cream." in the poem *Emperor of Ice-Cream*.

Q7) Explain any one the following with reference to the context in about 250 words. (1x5=5)

*"Because I could not stop for Death –
He kindly stopped for me –
The Carriage held but just Ourselves –
And Immortality"*

OR

*"Mistress, I dug upon your grave
To bury a bone, in case
I should be hungry near this spot
When passing on my daily trot.
I am sorry, but i quite forgot
It was your resting-place."*